

ESTABLISHED IN 1861 THE AMERICAN BEE JOURNAL OLDEST BEE PAPER IN AMERICA

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Mrs. Atchley's School "copy" has been delayed, but we expect to have another lesson next week, and regularly thereafter, at least each alternate week. It will be very interesting and profitable, and we hope that every beginner, as well as the more experienced, will avail themselves of Mrs. Atchley's practical lessons.

More Honors for Prof. Cook.—Since Prof. Cook located in California he has been elected President of two bee-associations—the California State and the Los Angeles County, the latter meeting monthly, we believe. It shows that the bee-keepers of the "Sunset State" know a good man when they see him. But please don't work the willing Professor too hard!

Wintered Well.—Almost every mail announces that bees have wintered well, and are in excellent condition for business. It seems that the cold weather the latter part of March made but little difference so far as concerns the strength of the colonies that were out-doors at that time. What is needed now is good weather, so that the bees can take advantage of fruit-bloom, and get ready for the white honey harvest in June here in the North.

Something Funny.—The erratic article which Mr. Latham dissects on page 690 of this number, was also sent us by Mr. Thos. Thurlow, of Pennsylvania, who remarked thus about it:

Inclosed find an article from one of our daily papers. Evidently the "schoolmaster is abroad," as far as bee-knowledge goes. You might want a humorous article sometime, and this is as funny as the Chinese letters. THOS. THURLOW.

We might say that to those who are not familiar with what was contained in the older cyclopedias, it will pass as very funny. Indeed, the veterans will probably enjoy it, as it will bring back the crude notions of half a century ago. There must be a very sleepy spot about a daily paper that would allow such antiquated stuff to appear in its columns. Some others of our readers may attempt to separate the true from the false in its statements. Don't. The insane asylums are full enough now.

A Generous Rainfall has come to this section of the country the past few weeks, which has greatly helped the growth of early-planted crops. It should also go a good ways toward assuring an abundance of blossoms for the bees to work upon. We hope the highest expectations of bee-keepers may this year be realized in the gathering of a large crop of honey.

A Well Merited Honor.—In the *Canadian Bee Journal* for May we find this pleasing item:

Congratulations are in order. Miss S. E. Pettit, a daughter of S. T. Pettit, of Belmont, has graduated in medicine at the Cleveland, Ohio, Medical College, taking

not only first rank in the graduating class, but taking a higher percentage of marks than any graduate has ever taken at the college before.

[How is this Bro. York? Canadians ahead on more than honey.—EDITOR.]

In reply to Bro. Holtermann's question, we would say, "She's all right!" She got her education in the United States—you see! Hurrah for Miss Pettit! There is nothing that pleases us more than to know of such clear proofs of woman's superior ability. We are indeed glad to hear of Miss Pettit's success in college, and only hope that she may *always* take "first rank" in her chosen profession.

We believe Miss (Dr.) Pettit is Bro. Holtermann's sister-in-law. No wonder he feels so honored. Who wouldn't?

Bee-Paralysis.—At the first meeting of the Central California Bee-Keepers' Association, 30 drops of carbolic acid to a gallon of honey was recommended as a cure for bee-paralysis or shaking palsy. Remove all the other honey, and feed the honey with the acid as indicated.

Busy on Early Bloom.—Bro. Holtermann, of Canada, writing on May 7th, said: "I never saw bees doing better on early blossoms." Mrs. Sallie E. Sherman, of Texas, wrote on the same date: "I now think I will get some honey, notwithstanding the severe cold the last of March. I have taken and sold 100 pounds of honey, and will extract more this eve. I have had four swarms. I keep down the swarming-impulse as much as possible. My bees are in fine condition."

Kind Words.—Bro. Barnum, of Colorado, one of our corps in the department of "Queries and Replies," wrote thus recently, for which we wish to return our sincerest thanks:

FRIEND YORK:—I believe no one holds vain "flattery" in less esteem than I; but sincere, honest praise—like honey—is indeed good for the soul! You are surely entitled to a full measure of all the honest, wholesome praise the brotherhood can bestow upon you. We owe you a "debt of gratitude" for the able and most efficient manner in which you are conducting the "Old Reliable"—and substantial and liberal should be your returns! May the good Lord bless and prosper you.

W. M. BARNUM.

Dr. Howard on Foul Brood.—

After examining Dr. Howard's new book on "Foul Brood," here is what some of the leading bee-keepers think of it:

The book on "Foul Brood" by Dr. Howard is received. I consider it a very valuable contribution on this subject, as it sets at rest many points heretofore in dispute, by the most careful scientific experiments. The nature of the disease, and the only effective treatment appears to be also settled.

To M. Quinby, however, writing in 1853, is due the honor of first adopting the only rational treatment. Yours truly,

DR. G. L. TINKER.

The *Progressive Bee-Keeper* says this about the book:

It is a master work, giving the experiments of the author, and a resume of the writings of others.

Dr. Miller's comment is expressed in the following:

The pamphlet of Dr. Howard on foul brood impresses me as the work of a sincere and candid investigator. It's a good little book. C. C. MILLER.

We mail Dr. Howard's excellent book for 25 cents, or club it with the BEE JOURNAL for \$1.15; or, we will send it as a premium for one new subscriber to the BEE JOURNAL for a year.

The Central California Bee-Keepers' Association was organized on March 12, 1894, with Mr. J. H. Hart, President, and J. H. Flory Secretary. Sixteen bee-keepers signed the constitution.

Queens and Queen-Rearing.—

If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may safely introduce any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearing"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, \$1.00; or clubbed with the BEE JOURNAL for one year—both

for only \$1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at \$1.00 each.

Bound in paper cover, postpaid, 65 cents; or given free as a premium for sending us two new subscribers; or clubbed with the BEE JOURNAL a year—both for only \$1.40. Send all orders to the BEE JOURNAL office.

When Too Cold for the bees to fly in the shade, do not open the hives.

A Hint for Beginners.—The *Progressive Bee-Keeper* gives this excellent hint to beginners in bee-keeping:

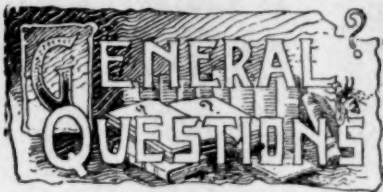
We have had a number of beginners write us this spring for information about bees, that they could get out of any bee-book. Now we are always glad to help them, but here is the point: They cannot afford to do without a good book until they get well started. If you want to keep bees, "post up" so you will not have to write some one to know what ails the bees.

Certainly, every one who would think of commencing to keep bees should first get a copy of one of the good bee-books, and read it thoroughly in connection with one or more of the bee-papers. A good book, well read, will save a multitude of simple questions. Please don't think we would discourage asking perplexing questions, for we wouldn't; only the very simple ones that a beginner could answer for himself by reading a good bee-book. By all means, own a standard work on bee-keeping, if you expect to succeed.

Catalogues for 1894 are on our desk from the following:

J. F. Michael, German, Ohio.
Stilson & Sons, York, Nebr.
F. A. Crowell, Granger, Minn.
A. C. Tyrrel, Madison, Nebr.
J. J. Bradner, Marion, Ind.

The Amateur Bee-Keeper, is the name of a neat little pamphlet designed for the class its name indicates—amateurs and beginners in bee-keeping. It is written by Mr. J. W. Rouse, of Missouri, a practical apiarist and helpful writer. It contains over 60 pages, and we will send it postpaid for 25 cents; or club it with the BEE JOURNAL for one year—both for only \$1.15.



ANSWERED BY

DR. C. C. MILLER,
MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—Ed.

Sweet Clover—Other Honey Plants.

1. Will sweet clover bloom the same season if sowed early in the spring?

2. If I should sow two acres of sweet clover, five acres of Alsike, and five acres of alfalfa, how many colonies of bees would this pasture, while I have every other advantage—about every fourth tree is a basswood? It is a good country for white clover, golden-rod, wild-rice, raspberries, wild-grapes, willows, sumac, soft maple, hard maple, box-elder, poplar, cottonwood, burr-oak, and elms, with plenty of other honey-weeds.

Rockford, Minn.

W. G.

ANSWERS.—1. No, I've seen plenty of it self-sown in the fall, and of course coming up very early in the spring, but I never knew it to blossom until the second year's growth, and the next winter after blooming it always dies, root and branch.

2. I don't know. Do you know whether you can get any honey from alfalfa on your land? As you may prefer a rough guess to no answer at all, I'll say that if you had the 12 acres in bloom it might support 50 colonies, but remember that's nothing but a guess, and I reserve the right to say 25 or 100 next time I am asked the same question. I wish some one could give us some reliable information about it.

Small vs. Large Hives, Etc.

The advocates of 8-frame hives have pretty thoroughly ventilated their side, so he who runs may read. But I notice that a few, even in the North, and with a honey-flow which is quickly over, still prefer the 10-frame hive.

1. Can you briefly present their side of the case, somewhat as a judge would do when charging a jury?

2. When the bees of a colony are all less than 16 days old, of course no honey is gathered (theoretically); when all are older than 16 days, would they be apt to

store less, or more, honey than a colony with a normal proportion of each, other things being equal?

3. If there is a golden mean, should it be such as to make the numbers of each about equal, or should the number of those of one age exceed the others?

4. Do you consider from \$1.00 to \$2.00 worth of honey in the outside combs as "dead capital?" What about the moral effect on the bees? I confess I do not understand those reports of a colony "filling a small chamber with brood," in the East. They will never do it for me. Here the bees build up according to the amount of stores in reserve, other things being equal.

5. Why is it necessary that wire for brood-frames should be tinned? Will they not become varnished with wax or propolis before the iron can have a deleterious effect?

6. What is the philosophy of the bad effect of iron vessels on honey?

7. When bees fill themselves on being disturbed, do they afterwards return the honey to the cells? If not, does it temporarily incapacitate them from duty to any extent? Does frequent disturbance (in summer, I mean) result in an appreciable increase in the consumption of honey? I mean, is it common-sense to suppose that it will; for of course we don't know, and never will.

F. L. T.

Denver, Colo.

ANSWERS.—1. I wish with all my heart that I were fully competent to charge the jury in this matter, giving what can fairly be allowed to both sides. So far as my own views are concerned, I am really and truly an interrogation point. I want to know the truth in the matter, and am ready to work back slowly to larger hives if that is best. But I think I can hardly satisfy you better than to refer you to two or three late numbers of *Gleanings*, in which I have tried to give in a very full manner just what you have asked for. C. P. Dant, who is a strong advocate, not for a 10-frame hive, but for a larger hive, will give his views in an early number of *Gleanings*. I think you will find that the advocates for large hives make these claims: That eight frames do not allow for the development of a sufficiently large colony; that in actual practice larger hives show better results; and if they can fully establish this last proposition, they have made out a case.

2. As a matter of actual fact, if there are no older workers in the hive, those 5 days old can be seen carrying in pollen, and it is believed they gather honey nearly as young. I can only give a guess in answer to your question. With all bees older than

6 days I suppose there would be no brood, and I should hardly expect the workers to be in as good heart as if prospects looked bright for a continuance of the "common-weal." Still I have known bees to work industriously when they were all above 16 days old, and hopelessly queenless; so I wouldn't like to be dogmatic about it.

3. In the case of an individual bee, I

should hardly expect any difference in its industry, whether the number of young bees were above or below the usual proportion. Without knowing anything positively about it, I have an impression that the exigencies of the case may make a difference as to the age of commencing work in the field. If the number of young or nurse bees is so large that all are not needed for housework, why may it not be that they may commence work in the fields sooner? If that should be the case then it might be best, if there is any lack of equilibrium, to have the balance on the side of the young bees.

4. I can hardly believe that you mean to have that last statement carried out to its extreme. That is, I hardly believe that a colony with 100 pounds reserve will build up twice as fast, or twice as strong, as one with a reserve of 50 pounds. Still, I do believe that a colony with a pound of reserve will do better at building up than one with only an ounce, and one with 20 pounds better still. I can imagine a case where \$1.00 to \$2.00 worth of honey in the outside combs would be dead capital, providing the size of the hive was so proportioned to the size of the colony that there was no possibility that the honey of the outside combs would ever be touched by the bees. I can also imagine a case where it might be very live capital, the honey being drawn upon at a time when in a smaller hive the bees would limit their operations for the want of stores.

5. I don't know. Once inside the wax, I suppose the untinned wire would be all right, but I don't believe the bees would coat the part of the wire that was not built into the comb. But I'm not sure whether the untinned wire has been fairly tried. The tinned wire certainly works well, and there would be very little saved in using the other.

6. The acid of the honey is supposed to work on the metal. But I don't know much about it from actual experience.

7. That question hardly comes within the limit of my knowledge. As a guess, I should say that if you do anything to make a bee fill itself when without your interference it would not fill itself, that bee is not in quite so good a shape for its work as if you had let it alone, and it will cost you at least a little fraction of the drop of honey you made it gobble. Mind you, that's a guess; I don't know.

A New Edition of "The Bee-Keepers' Guide; or Manual of the Apiary," by Prof. A. J. Cook, has just been issued by the publishers of the BEE JOURNAL. Sixteen thousand copies of this excellent and complete bee-work have already been sold, and it is to-day as standard as ever—Plain—Practical—Scientific. It contains over 450 pages, is beautifully printed, neatly and substantially bound in cloth, and is sent postpaid for \$1.25 per copy; or clubbed with the BEE JOURNAL for one year—both for \$1.65.



CONDUCTED BY
MRS. JENNIE ATCHLEY,
 BEEVILLE, TEXAS.

Beeswax on Clothing—Pieces of Comb.

MRS. ATCHLEY:—The way I remove beeswax from clothing, is to lay a piece of tissue-paper on the wax, then pass a hot flat-iron over it; repeat it, that is, move the paper and pass the hot iron over it until the wax disappears from the cloth.

I have two colonies of bees. The frames are too large for Langstroth hives, so I cut the comb out and fit it in Hoffman frames, which leaves me a lot of small pieces of comb. Would it do to wire the pieces in a frame, just as well as to give the bees comb foundation?

J. C. KNOLL.

Friend Knoll, I feel myself indebted to you for the recipe to remove wax from clothing, and I *know* it will benefit many others. I thank you very much for your kindness.

In regard to your pieces of comb I will say that if the combs are new, you can use them as starters, or place them in a frame and fasten them with strips of wood tacked across the frames on both sides, and the bees will soon patch them all up nicely. But if combs are old and dark, I would not use them.

JENNIE ATCHLEY.

Mating Young Italian Queens.

MRS. ATCHLEY:—Please tell me in the AMERICAN BEE JOURNAL how to get my young Italian queens purely mated.

T. N. PETTIGREW.

Fincastle, Va.

Friend Pettigrew, there are several ways to manage to have nearly all your queens mate purely. I will name two, and if you will follow either plan you will have but *very* few mismated queens:

1st. Allow only the pure drones to fly within two miles of your mating

yard, by putting the hives out that far from other bees.

2nd. If you are not so situated to move your hives containing the virgins out beyond the easy flight of other drones, put drone-excluding zinc over the entrances of all the hives with undesirable drones, and do not allow any but your pure drones to fly.

Now, all that you have to do to insure safe mating is to so arrange your mating yards that *nothing* but pure drones can fly, and you will be O. K. I know you are a beginner, and this is why I go into detail for you, as I could have only said in a short way, do not allow any but pure drones to fly within two miles of your bees, which would have answered your question. But I propose to be as much help to you as my time will allow, and as I am able, so, now to close I will repeat, you *must* so arrange your hives with zinc so that your impure drones cannot fly; or carry the virgin queens in their hives, together with the pure drones, at least two miles from other bees, to be on the safe side.

JENNIE ATCHLEY.

The Texas State Convention.

(Continued from page 587.)

The following historical address was delivered by Dr. Wm. R. Howard:

Origin of the Texas Bee-Association.

This is our 16th annual meeting, and it is to us more like a family reunion than a meeting to transact business. Yet we are here from all parts of our beloved State, each one with his mite of experience to contribute to the general welfare of each other. When last we met here, we counted five of our original or charter members, to-day we meet these same members who have been with us from the beginning. Yet many are here who have for years been active and efficient members, who have done their part toward perpetuating our noble society.

I am persuaded that a brief history of the origin and progress of this association of fraternal workers will be of interest to many here, if for no other purpose than to recall many of the happy recollections of bye-gone days, when many of us were younger and more earnest in the work. While our sweetest dreams have not been realized, our fondest hopes have not ended in fruition, or our most ardent faith ended in sight, yet that sweet charity of brotherly love

which inspires the heart of every bee-keeper has endured down to this blessed day. We are truly a band of brothers among whom no contention can ever exist. Our calling is one which incites emulation, encourages industry, and promotes fraternal affection. It opens the door to mysterious nature, it welcomes the glory of God, it admonishes to love one another. It breathes the breath of science, it inculcates that virtue, patience, and makes us better for our mingling together.

It was away back in the '70's when I first made the acquaintance of Bro. Graham—we were brothers from the very beginning. We talked over the plan of organizing a State Bee-Keepers' Association. Our plans were made known to our late and lamented brother, Judge W. H. Andrews, whose name has a charm for all who knew him. We asked his assistance in the work, to lend us his aid in issuing a call to organize this association. His generous answer was, "Put my name down in the call." He being the best known and the best practical bee-keeper in the South, his name headed the call, followed by W. R. Graham, John Mason, and my own.

The first meeting was held in the summer of 1877, in Greenville, which was a mere village. An organization was formed with 12 members. Judge Andrews was our first President, and your humble servant the first Secretary. A committee was appointed to draft a constitution and by-laws, to report at our next meeting, to be held some time in May, at Judge Andrews' apiary in McKinney. Bro. Graham and myself were the only members who went from this county; it was before the day of railroads here, and we traveled the 30 miles on horseback. There our association enrolled 21 new members, a constitution and by-laws were adopted, and the permanent organization of the Texas State Bee-Keepers' Association was effected with 33 members. This was our first annual meeting.

The conventions were held at Judge Andrews' residence for several years as the most convenient place on account of railroad advantages, and the attractions of the Judge's apiary of 300 colonies of beautiful Italian bees. We were always entertained at the Judge's house, where we feasted on the good things at the Judge's table, which was always presided over by his good wife and daughter. These were happy days, Bro. Graham, to you and me, and I am sure there are many others who, when they recall those days, have a tender spot in

their hearts for the good Judge and his family. Then, as now, our watchword was, and has ever been, "No hotel bills."

Mr. President, when I look at this magnificent structure, this supply factory of the W. R. Graham Manufacturing Co., I cannot refrain from again recalling my earliest acquaintance with Bro. Graham, when he lived on the prairie a mile or so west of here, and had a few colonies of Italians and hybrids; when this place was an open common; we had no railroads—hardly began to dream of them as possibilities. The only settlement near here was a flouring mill a few hundred yards north of this factory building, and a few small buildings occupied by workmen in the mill.

How well I remember the first bees I ever owned in Texas; I bought two colonies of blacks in box-hives, and transferred them to movable frames. One I found to be queenless, and full of laying workers, with the nicest lot of little drones you ever saw, going and coming as earnestly as if at work.

My first Italian queen was given me by Bro. Graham, in the shape of a queen-cell nearly ready to hatch; which was carried by me nearly 10 miles, "This side up with care," and placed in a nucleus previously prepared. She hatched in 48 hours after her arrival, and I counted the days impatiently after she began to lay, until I saw the bright-banded hybrids come forth.

I furnished the hives and transferred the bees for my neighbors until I got a start, which in three years increased to over a hundred colonies. To supply my neighbors with hives for their increase, I put up a horse-power and got a circular saw, and made hives; soon I added another saw, then dovetailing machinery for frames, comb foundation machinery, etc., and handled a general line of supplies. The business grew, and in 1883 I sold out, and Bro. Graham began in 1884 to make hives and foundation on a small scale, with a little addition to the machinery I had. His business increased until now you see this plant, costing several thousand dollars, with its 30-horse power engine, and all the improved machinery for making fixtures for bee-keepers, managed by men who have spent the best part of their lives in the factories in the East.

This is the fulfillment of my early dreams, and Bro. Graham, my dearest friend, the happy possessor of the enterprise, and none is prouder of his possessions than I. WM. R. HOWARD.

A committee was then appointed to select questions for discussion, composed of I. H. Hightower, A. M. Tuttle, and J. L. Wooldridge.

NATURAL SWARMING OR DIVIDING.

The first question was: In operating an apiary for honey, which is the better method of increase, by division or natural swarming?

The President was of the opinion that it was the more profitable to allow the bees to follow their own instinct—natural swarming.

Mr. Tuttle favored prime swarms, as he could have his bees to swarm at the proper time by feeding; he controlled after-swarming, and generally had little trouble with swarms the first heavy honey-flow.

H. L. Bolton preferred division, as his bees would not swarm enough if left to natural swarming. He had always been successful with division.

Mr. Wooldridge had always preferred division heretofore, but as division invited robbing he would hereafter practice natural swarming. He wanted to get some bees which would not swarm. He had a swarm to come out a few days ago, before starting on queen-cells.

The unanimous voice of the convention was in favor of natural swarms.

COMB HONEY OR EXTRACTED?

The next question: Which is the more profitable, to produce comb honey at 15 cents, or extracted at 10 cents per pound?

Mr. Wooldridge could make more money by producing extracted honey.

F. S. Brantigam could make comb honey pay 30 per cent. more than extracted.

Mr. Tuttle could produce twice as much extracted honey, and would not have the trouble of handling sections, crates, etc.

Mr. Bolton coincided with the views of Mr. Tuttle.

Dr. Marshall had always produced comb honey, and could not speak on the relative amounts.

Dr. Howard had not handled bees lately, except to supply his own table, but several years ago produced mostly extracted honey, and believed that more than twice as much extracted honey could be produced; by his management no combs were built during the surplus honey-flow, the combs being closer, heat was more easily maintained, and honey could be stored when the temperature of the hive was too cool to manipulate

the wax in comb-building; fewer bees were required to maintain the heat. In producing comb honey, the combs were so far apart in the supers that more bees congregated there than could work in order to raise the temperature so the wax could be worked and comb-building carried on.

RE-QUEENING AN APIARY.

The third question discussed was: When is the best time to re-queen an apiary to change from black to Italian, without interfering with honey-gathering?

Mr. Tuttle thought it would depend upon the time the surplus honey-flow came on; he would re-queen late in the honey-flow.

W. H. White would change in the spring, and know what kind of queens he used. In localities where there was a horse-mint flow, followed by a good fall honey-flow, he would make the change in the fall.

Mr. Wooldridge would re-queen any time that he had the queens, and would always supersede a poor queen.

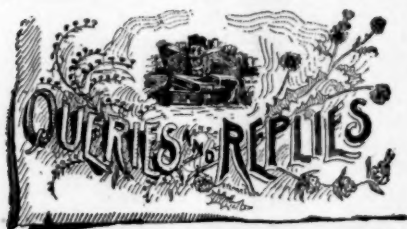
Dr. Howard would always re-queen in the fall after the horsemint flow, at the beginning of the flaxweed honey-flow, as this honey was only fit for wintering. He would thus avoid the loss of the work of a colony that might by chance be given a poor queen in the spring, and would have ample opportunity to judge the quality of the queen during the fall flow, and supersede any poor queen before the end of the season.

P. F. Gassaway would re-queen after the surplus honey-flow in the fall.

(To be continued.)

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for \$1.15. Orders received now.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year, for \$1.10.



Where to Extract Honey From.

Query 923.—In running for extracted honey, is it better to extract only from the upper story, or from the brood-chamber as well?—**Apiarist.**

From the upper story.—**P. H. ELWOOD.**

From the upper story.—**G. M. DOOLITTLE.**

From the upper story only.—**G. L. TINKER.**

I think from the upper only.—**C. C. MILLER.**

The upper story only.—**Mrs. J. N. HEATER.**

Only from the upper story.—**J. H. LARRABEE.**

As a rule, only from the upper story.—**M. MAHIN.**

Extract only from upper stories.—**C. H. DIBBERN.**

"Only from the upper story."—**Mrs. L. HARRISON.**

We extract only from the supers.—**DADANT & SON.**

I never disturb the brood-chamber.—**J. M. HAMBAUGH.**

I never extract from the brood-chamber.—**J. A. GREEN.**

I extract from all frames containing no brood.—**J. P. H. BROWN.**

It is usually best to extract only from the upper stories.—**A. J. COOK.**

I don't extract from the lower story if they work well in the upper one.—**H. D. CUTTING.**

Only from the upper stories, if the brood-chamber is of ordinary size only.—**R. L. TAYLOR.**

When I produced extracted honey I took off the surplus, no matter in what part of the hive it was stored.—**Mrs. JENNIE ATCHLEY.**

I prefer extracted honey taken from combs that have never had any brood in them, therefore I should let the brood-chamber alone, and give the bees plenty of combs above.—**EMERSON T. ABBOTT.**

Let the brood-chamber alone, as a rule. If room is given above, there is no danger of too much honey being stored below.—**EUGENE SECOR.**

If there is too much honey in the brood-chamber, extract it, of course, because it is better to give the queen plenty of room.—**A. B. MASON.**

During the season get all the clear extracted honey you can! The operator's own personal judgment should be the guide in such matters as this.—**W. M. BARNUM.**

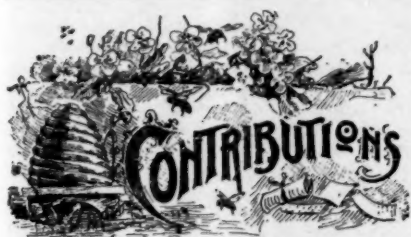
We use three stories, and then extract from the second and third. If I had only two stories I would keep the honey out of the lower one until the bees had just time enough to fill the upper stories full of honey for winter food.—**E. FRANCE.**

Much depends. In extracting from the brood-chamber there is great danger of throwing out a large quantity of brood, and thus weakening the colony. Make an individual case of it, and use your own judgment. I don't think any satisfactory and positive rule can be given.—**J. E. POND.**

I would only extract from the upper story, and leave that deposited in the brood-chamber for the bees, unless sugar were much cheaper than the extracted honey—enough so to pay for the trouble of handling the honey and then feeding them back sugar, for their winter stores.—**JAS. A. STONE.**

Mostly from the upper story, but it sometimes happens that there will be too much honey stored in the brood-frames. It may happen when swarms have been hived on full sets of combs, and where colonies have swarmed and had their brood mostly out at the commencement of the honey harvest. In such cases they may fill up with honey to the exclusion of brood. In such it would pay to extract from the brood-nest.—**S. I. FREEBORN.**

I never enter the brood-chamber to take honey. The trouble I most often meet with is an empty brood-chamber in the fall when the brood is all hatched out. The best condition I can conceive of at any time of year, is a good supply of honey in the brood-chamber. When I "feed back" pure honey at the close of the early honey-flow (early in July), to have my unfinished sections completed, I have the work done over brood-nests chock-full of sealed honey and brood, and there is a surprisingly little loss in "feeding back."—**G. W. DEMAREE.**



Italian Bees—Historical Facts.

Written for the American Bee Journal

BY M. M. BALDRIDGE.

The writer has been a constant reader of the AMERICAN BEE JOURNAL from its very first issue in 1861, and he has tried to keep himself pretty well advised about bees from that date up to the present time. He, as well as many others, has always regarded the "Old Reliable" as the special repository for historical facts about bees, hives, etc. From time to time certain statements have appeared in the AMERICAN BEE JOURNAL that were said to be historical facts, but, on close inspection, they did not prove to be. Without doubt the writers believed in many cases that their statements were indisputable facts, but sometimes they found that they had, in some way, been misled, and, when shown their mistakes, have generally been willing to stand corrected; but, occasionally, the reverse has been true.

I find on page 244, some statements about Italian bees and P. J. Mahan, made by C. J. Robinson, one of the oldest writers on bee-culture now living in the United States, that I do not fully endorse; and I therefore think they need some attention, and likewise some correcting. To treat the subject fairly, I will try to give in detail, and, in substance, what Mr. R. says, as follows:

1. In 1859, P. J. Mahan and I tried to induce the Chief of the United States Patent office to send Mr. Mahan to Italy as Government Agent, to buy some Italian bees, and to bring them on to Washington to be tested. The official refused to do as desired, but instead instructed S. B. Parsons, who was acting as government agent in Europe, to secure a few colonies of said bees, and to forward them on to his Department. The purchase was made, as per instructions, but the bees did not reach the Patent Office. But "Mr. Parsons got the bees," and

this was the "Parson's importation" we have read so much about.

2. Soon after Mr. Mahan's proposition was refused by the Patent Office, as stated, he went himself to Germany and obtained some Italian bees and queens on his own account from both Dr. Dzierzon and Baron Berlepsch, and, on his return, he brought them to the United States. There were also a few colonies of Italian bees, upon the same steamer that Mr. Mahan came, consigned to Messrs. Wagner and Colvin. This was in September, 1859. Mr. Mahan succeeded, on reaching New York, in landing his bees before the Wagner and Colvin consignment was landed, and, therefore, claims the honor of being the first to land living Italian bees on the American continent. Besides, Mr. Mahan was also the first person to breed Italian queens in America.

In regard to the foregoing I would say this:

1. The impression that I got from this statement is that Mr. Parson's did not obey his instructions from the Patent Office, nor treat his employer fairly nor honorably in this Italian bee transaction. In other words, what Mr. Parson's did on that occasion, in plain English, was dishonest. Now, if my interpretation of what Mr. Robinson says, or insinuates, be incorrect, please Mr. R., do explain, just exactly what you intended to convey. But let me warn you in advance to be very careful what you say in reply, for I happen to know what the main facts are and were.

2. Now, Mr. Langstroth denies that Mr. Mahan, on that occasion, was the first person to land living Italian bees in America. Here is *verbatim* what Mr. L. says on that subject:

"Our queens, which came in 1859, were in charge of a German resident of Brooklyn, N. Y., who was returning home from a visit to his friends, and to whom Mr. Wagner had given very careful directions how to care for them. This person, learning that Mr. Mahan had expressed the intention of having the honor of landing, in America, the first living Italian bees, and desiring, as he told me, to secure this honor for us, communicated Mr. Mahan's intention to the captain, who, as soon as the gang way was in place, was the first person to step ashore, proclaiming with a loud voice, 'These are the first Italian bees ever landed on the shores of America!'"

So, you see, Mr. R., your statement that Mr. Mahan was the first person to land the Italian bees on this continent

alive is one that I think needs correcting.

That Mr. Mahan was the first to breed Italian queens in this country possibly may be true, but Mr. R. might find it very difficult to prove it. On that point Mr. Langstroth has also something to say, as follows:

"In the latter part of 1859 we received nine living Italian queens. During that fall and winter we reared 'two or three young queens.' The following spring we found that all our imported queens had perished." Mr. Colvin is a witness to the same statement of "two or three queens" having been reared in the fall of 1859 from said importation, made by himself, Wagner and Langstroth. See his essay on Italian bees in the Agricultural Report for 1863. The citations credited to Mr. Langstroth, in the foregoing, may be found on page 82, AMERICAN BEE JOURNAL for 1881.

To conclude: I have seen it stated somewhere in print by Mr. Robinson, that the Parson's importation of Italian bees cost the United States government the sum of about \$1,800, and that it got nothing in return. I think that, in substance, is about what Mr. R. has stated. If my statement be not correct it is open for correction. But, if correct, permit me to say in reply, that it never cost the Agricultural Department not even *one-tenth* of that sum of money for what it may have done in the direction of importing Italian bees via S. B. Parsons. I also happen to know some facts about that matter, which sooner or later may be made public. But let us first hear from Mr. Robinson.

St. Charles, Ills.

Bee-Keeping for Farmers Commended.

Written for the American Bee Journal

BY DAVID HILL.

On page 154 appeared a letter from Mr. T. C. Kelly, of Slippery Rock, Pa., in which he asks the question, "Shall the farmer keep bees?" and his emphatic reply in the negative being somewhat at variance with my experience, I take the liberty of replying briefly.

One might infer from Mr. K.'s letter that he is in favor of making the production of honey a specialty, but after reading the reports from different parts of the county for the last few years, it would seem to be—except perhaps in the most favored localities—a rather precarious business. I fail to see why a

farmer cannot spare a little time occasionally to look after his bees as well as a man engaged in any other occupation.

I have always been a farmer, and for the last 45 years, or since I was a boy of 13, I have kept bees nearly all of the time. About 25 years ago I saw an advertisement of "Quinby's Mysteries of Bee-Keeping." I procured a copy, and no romance which I had ever read, had so much of real fascination for me as did the contents of that book. Soon after this, I subscribed for a bee-paper, published, I think, in Ohio, by a man by the name of King, and during the year that I read that paper, I learned of the existence of the AMERICAN BEE JOURNAL, then published in Washington by Mr. Wagner. I obtained a copy, and found it so far in advance of the one I was taking, that at the end of the year I dropped the one and subscribed for the other. That I think was in 1871, since which time, with the exception of about a year or two, I have had the BEE JOURNAL continuously until now.

I have thus spoken of my familiarity with the "Old Reliable" as a sort of explanation for whatever success I have had in the production of honey. Of course I do not advocate the idea that the farmer, or any one else, should undertake the production of honey without thoroughly posting himself in the business, and I would advise him then to keep but a few colonies until he has reduced his knowledge to practice.

Many of the farmers in this vicinity are shrewd business men, who are quick to see, and ready to adopt any new idea which is an improvement over the old way, and while comparatively few have any desire to spend any time with the bees, many of those who do are adopting the new methods, and are meeting with a fair amount of success.

Then, again, the farmer owns most of the land on which grow the flowers that secrete the honey. What more appropriate than that he should keep these busy workers to gather up the products of his own soil? But perhaps some will say with Mr. Kelly, that the farmer has so much to do that he doesn't have time to take care of bees. This is doubtless true of the indolent or unmethodical farmer, and I would not advise any of this class to go into the business; but to the energetic man, who takes time by the forelock, who sees that each class of work is done in its season, if he lives in a locality similar to this, where there is plenty of white clover, basswood, and buckwheat, I would say try the business carefully with a colony or two at first

and increase them slowly until you have gained knowledge by experience. Try producing both comb and extracted honey, and see which you like best, and what the market demands. I used to produce both, and I sold the comb for 15, and the extracted for 10 cents per pound (in 10-pound lots), for the white honey. But for a few years past I have produced only extracted honey, as the demand for that is much the better.

In regard to the time required to care for a small number, say 20 or 25 colonies, after you have had a few years' experience will you find it doesn't require a great deal of time, if you run for extracted honey, and have the upper hive-stories ready—at least two for each colony of the capacity of the brood-nest, or its equivalent, with plenty of surplus combs.

I winter my bees in the cellar, and for 25 colonies I allow a half day to carry them in, and the same to take them out in the spring. After they have been out a week, examine to see if all have brood or eggs; if not, they are probably queenless, and should be united with the weakest colonies. See that all have plenty of honey, and step out amongst them after dinner every day or two and see if any robbing is going on; if so, contract the entrance, or carry them into the cellar for a day or two.

Put on one of the upper stories as soon as the hive is crowded with bees, and honey is coming in freely. When this story is two-thirds full, raise up and put the other story under it. When the bass-wood bloom closes, extract from both chambers, and leave only one on for buckwheat, and fall flowers in this locality.

In September, see that each colony has 30 pounds of honey; and if you winter them in the cellar, you can extract the most of the rest, but be sure that each one has an abundance, or else save some of the combs for spring use.

Warsaw, N. Y.

Closed-End vs. Hanging Frames.

Written for the American Bee Journal
BY F. L. THOMPSON.

On page 367, Mr. G. W. Demaree pays his respects to close-fitting frames. I have not yet seen a complete presentation of all the *pros* and *cons* of the frame question, but this is just what all those new subscribers of the BEE JOURNAL who want to start right, and not make

changes in the future, ought to have. I will give all the points I can think of concerned with a choice of frames; if any are unintentionally overrated, underrated, or omitted, those who know can make corrections.

Hanging frames (omitting the old-style closed-top, which is very unhandy, and retards work in the supers) are of three kinds:

1st. The ordinary Langstroth frame, sold at the factories, too well known for description.

2nd. The Hoffman, the same with these exceptions—the end-bars, for about one-third of the way down, are $1\frac{1}{2}$ inches wide, so that here the frames touch one another when hanging in the hive, consequently always preserve the correct spacing; and one edge of the wide portion of each end-bar is beveled, so that a sharp edge of one frame always joins a flat edge of the next one.

3rd. Like No. 1, but spaced, by some device not contained in the frame itself. The "wire-end" frame, described by Mr. Barnett Taylor on pages 336 and 337, is the best example. To quote him, "The top of the frame is kept in place by the wire ends of the frame resting in a shallow notch in the edge of the tin rabbet, and the bottom is held by suitable wire staples driven into the ends of the hive body. . . . the wired ends being 6-penny wire-nails driven into the top ends of the frame." It should be noticed here that if the staples are driven into the bottom-board, they are a nuisance when loose bottom-boards are used.

The end-bars of closed-end frames are $1\frac{1}{2}$ inches wide the whole length, and not beveled on the edges. Now to compare:

1. The Hoffman costs a little more than the others.

2. The wire-end frames takes a little more construction work, in measurement, driving staples, and filing notches.

3. The ordinary frame can be spaced correctly. If the bee-keeper uses a notched stick, or some such device, when setting frames back (not trusting to his eye), always uses the spirit level in setting hives, and keeps the interior of the hive, and the ends of the frames reasonably free from brace-comb, so that nothing will prevent the frame from hanging perpendicularly when left to itself; and if the frames have been nailed square, and if they are not twisted, that is, square in three dimensions as well as in two, there appears to be no reason why the combs should not

be as regular in the unspaced as in the spaced frames. But, as a rule, they are not. Some one or more of the above conditions is usually violated. The Hoffman and the wire-end frames will always remain true in spacing, even if twisted in nailing; but they must be nailed square, or bracer-comb results. The closed-end frame may be both twisted and out of square when out of the hive, and will be all right in it when keyed up. All four require the hive to be level, and irregular old combs to be culled out, so as not to stand next to new ones in the process of building.

4. The closed-end frame can be reversed; the others cannot. Opinions differ about reversing. See *Queries* 840 and 886, pages 494, Vol. XXIX, and 272, Vol. XXXII. If desired to have comb built clear to the bottom of the hanging frames, without reversing, the scheme of J. M. Pratt, mentioned on page 638, Vol. XXIX, may be tried. He says: "I use the Langstroth frame without flat wooden bottom, using a No. 9 wire instead. The combs are built and joined to the wire below. The combs are never joined or glued to the bottom of the hive, as is the case with wooden bottoms."

5. The closed-end frame, extending clear to the ends of the hive, is slightly more economical of space than the others; and, when reversed, still more so.

6. The projections of hanging frames are said to be inconvenient in some extractors.

7. The top-bars do not sag. The closed-end frames, being made reversible, are not provided with thick bars; the others usually are. But when frames are wired as they should be, and of $\frac{3}{8}$ inch stuff all around, the sagging is not noticeable unless one sights along the top—if then.

8. Thick top-bars are one preventive of brace-comb. Here the closed-end, as usually made, must yield to the others; though it is not debarred the use of the other preventives, viz.: wide top-bars, break-joint honey-boards, and correct spacing of the upper story.

9. The ordinary frame, if hung on a flat rabbet in the wood, becomes propolized at the points of junction, and requires the chisel to pry it up; if hung on a tin edge, this is obviated.

The wire-end frame apparently leaves nothing to be desired in this respect.

I know nothing of the Hoffman from experience; Mr. Heddon points out that the narrow part of the end-bars invite propolis and burr-comb, which interferes

with withdrawal. Read his whole article in favor of closed-end frames on page 637, Volume XXIX.

Mrs. Atchley says somewhere in *Gleanings* that considerable prying and digging is required to get the first Hoffman frame out, or the dummy. I do not see how this fault can lie in the frame; there must be some undesirable feature in the hive. Either there is no provision made for lateral movement (see paragraph 10 below); or the dummy uses up more space than it should; or the projections rest on a flat wooden rabbet, though this would make it no more than the ordinary kind.

Closed-end frames, fitting one another tightly, do not allow the bees behind or between them; consequently the only propolis to interfere (if hive and frames are factory made and true) is a slender line along the juncture. Any one who has had pried-up sections glued together in this manner, and takes them apart on a cool day, may imagine this to be a serious objection when applied to frames. But a little thought will show the difference. The section is small, and affords little leverage, besides being fragile; the frame gives abundant purchase. As a matter of fact, I have never had any difficulty in getting frames apart. During the summer, if the fingers of both hands are pressed against the top-bar of the frame to be removed, while the thumbs press against the top-bar of the adjacent frame, they come apart without jar or effort. In the cool days of spring or fall, a small lever applied in the same way, first at one end of the frame, then at the other, brings them apart with a slight snap, but not enough to irritate the bees, unless smoke is not used.

I cannot, therefore, from anything in my experience, see what that "strongest argument" is to which Mr. Demaree refers on page 367. Doubtless three frames can be taken out together and set against the hive as a unit, though I would not like to try it on a hot day; but they can be taken out singly, too. And why those other two frames should be stuck together as tight as wax, is more than I can see, unless the combs themselves are actually united; but in that case the close-fitting frames are not responsible. That half-bushel of bees, I think, are peaceably crawling over the combs, if they have been properly smoked.

10. The common and the wire-end hanging frames have what Mr. Taylor calls "lateral movement" (page 337)

The closed-end and the Hoffman have not—in themselves; but lateral play to the extent of $\frac{1}{4}$ inch (enough when the combs are regular) is secured in getting out any desired frame, by the space of that amount, which, in correctly made hives, is provided for between the outside frames and the sides of the hive. When the frames are in, the outside frame is prevented from leaning over into this space by the “wedges or screws” referred to by Mr. Taylor in his condemnation of this style of frame. I use Heddon's wooden thumb-screws, which serve also to hold the hive and frames together, when desired to lift the hive from the bottom-board. But I am assured by a neighbor of mine, a practical apiarist, who uses none but closed-end frames, that the slight amount of propolis referred to above is sufficient to keep the frames attached to one another in an upright position, without wedges or screws.

11. In withdrawing and inserting one comb among the others, a closed-end frame requires less care than any of the hanging frames to keep the comb from knocking against the adjacent ones, and crushing bees between—a small matter when looking at but one comb, but of considerable importance when many are to be inspected. The wide end-bars absolutely prevent the combs from approaching one another closer than they ought to. When looking at but two or three combs in a hive, I do not first take out a frame and lean it against the hive, then spread the others, but put each one back before taking out the others. This facility is a convenience when obliged to look at brood in cool weather. The wire-end frame, Mr. Taylor claims, has the same facility; but it is certainly not secured, as is the closed-end, against a possible false movement before it reaches the staple below.

12. “It kills bees,” is the great objection made by theorists against the closed-end. As a matter of fact, however, I have killed no more bees, and have a strong impression that I have not killed as many, as when I had the ordinary type of the hanging frame, with its undulatory combs, its brace-combs between frame-ends and hive, its inaccurate spacing, and its unguarded end-bars.

There is no excuse for killing a bee between two end-bars of the closed-end frame. When no bees are observed in that position, a frame can be inserted slantingly, then swung up against the next one; but when bees are crawling everywhere, it is nearly as easy to *slide*

down one frame against another with a slight shaking motion. If the ends of the frame rest on a flat surface, there is some danger of catching a bee there; but this may be obviated by going slow when the frame is nearly down, and joggling it slightly up and down. The chances are much lessened when the ends rest on a tin edge, as in the Heddon hive.

The Hoffman and the wire-end frames, however (with the limitation referred to in paragraph 11), must be conceded to be superior in this respect to the other two; but the Hoffman would not be superior to the ordinary type if it were not for its accurate spacing, and consequently better combs, when the bee-keeper is careless.

13. The closed-end frames form an interior solid wall, $\frac{3}{8}$ of an inch in thickness, at each end of the hive, with a dead-air space between it and the end. None of the other frames contribute to the warmth of the hive. Hence, I do not see how Mr. Taylor can make the claim that the wire-end frame combines all the good points of suspended and fixed frames.

To conclude: The ordinary hanging frame is not “in it” for automatic accuracy. The other three have no excessive advantages over one another, with the exception of hive warmth, which is important, and, in my judgment, gives the palm to the closed-end.

The popular conception of the closed-end frame—fostered by unfair manufacturers—is altogether wrong. It is superior to the common hanging frame in the very points in which it is thought to be inferior—ease of handling, and freedom from bee-killing, when rightly handled.

When the frames are not uniform, and the hive badly spaced, or set uneven, or if no provision is made for lateral play, closed-end frames may cause trouble just as any other frame would.

I have said nothing of the slotted top-bar in the wire-end frame, because I do not see that it has any advantage over the ordinary thick bar.

To judge from its advertisement, the new Aspinwall frame appears to combine many good points of the others. It leaves out two, however—hive warmth and reversing. It does not seem possible to combine all points in one frame.

Arvada, Colo.

Have You Read the wonderful Premium offer on page 639?

Management of Weak Colonies.

Written for the American Bee Journal

BY G. M. DOOLITTLE.

As early in the spring as the bees can be looked over, all of the weaker colonies I shut on as few combs as they have brood, in using a division-board for contracting the hive. They are now left until warm weather comes, being sure that all have stores enough where they can conveniently get at them to carry them until this period. They are now built up as rapidly as possible by reversing the brood, etc., so that by June 1st the best of them will have five frames of brood, others four, and so on down to one, for the very weakest. As soon as the best has its five frames filled with brood down to the very bottom corners (and none are allowed more combs until they have them thus filled), a frame of hatching brood is given to one having but four frames, and an empty comb put in its place. In taking a frame of hatching brood in this way I generally take all the bees there is on it right along, only being sure that I do not get the queen, so that all the young bees on this comb helps to give strength to the next weaker.

In a few days a frame of brood and bees is taken from each of these two five-frame colonies and given to the one having but three frames, and so keep taking until all have five frames each. Do not make the mistake and try to strengthen the very weakest first, as we are often told to do, for by so doing from $\frac{1}{2}$ to $\frac{2}{3}$ of the brood will perish from cold. By the above plan we are always safe, and advancing warm weather is in our favor also.

In a few days, after all have five frames of brood, we are ready to unite, and if all has been done as it should be, the uniting will be done about the time white clover begins to yield honey nicely.

To unite, look the frames over of No. 1 until the queen is found, when this frame having the queen on is put outside the hive. Now spread the frames apart of No. 2, when the four frames of brood, bees and all from No. 1, are carried and placed in each alternate space between the frames of No. 2, closing the hive. Return the frame having the queen on to No. 1, placing beside it an empty comb; adjust the division-board and the work is done.

In two or three days put the sections on hive No. 2, or tier up for extracting, and see what a "pile of honey they will

roll up." At the same time place an empty frame between the two filled ones in No. 1, and in a few days you will have a frame filled with as nice worker-comb as you ever saw. Nearly all the old bees carried to No. 2 will have returned by this time, so that No. 1 is a splendid strong nucleus, just right for building nice, straight worker-comb.

As soon as the first frame is full of comb, insert two more empty frames between the three full ones, and thus keep on until the brood-chamber is filled. If at any time they should start to building drone-comb, then use frames filled with foundation, for this is the time foundation can be used profitably. By fall this colony will be in good condition for winter, while No. 2 will have given three times the honey the two would have done if left to themselves, or had they been united in early spring.

Borodino, N. Y.

[The foregoing article by Mr. Doolittle was published in the BEE JOURNAL in 1886, but by reason of urgent request we reproduce it for the benefit of the many new readers that have been added to our list since then.—EDITOR.]

Straw Hives and Modern Bee-Culture.

Written for the American Bee Journal

BY HAYCK BROS.

We desire to explain the merits of the "American Straw Hive," and show its perfect adaption to improved bee-keeping.

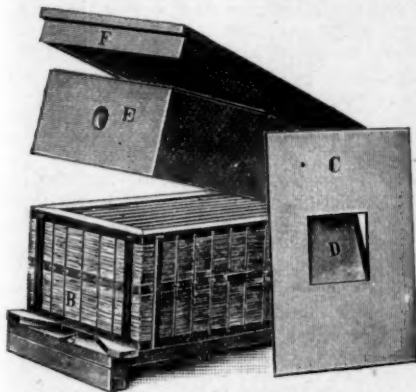
We would first cite the reader to the popularity of the old straw skep, which may best be shown by copying from an article in the *Illustrierte Bienenzeitung*, and reproduced in *Gleanings* for 1892, from the pen of that veteran German bee-master, Mr. C. J. H. Gravenhorst, wherein he tells why the bee-keepers of Germany stick to the old straw skep. He says:

"In one part of North Germany the old straw skep is to-day the hive most in use; thousands of pounds of honey are produced in it, and thousands of men earn the greater part of their livelihood by bee-keeping after the old fashion. Why is it the owners, I might say without exception, stick to their old hives? Answering this question, I must say: The hive they use is unsurpassed by any other in regard to wintering bees out-doors, preserving the colonies in the spring and through the season. If you go over Europe you will meet with

this hive in every country from sunny France to the frozen shores of Siberia; and almost everywhere the bees thrive in it, even without any care of men. Who, in the civilized world, is not acquainted at least with its picture?"

We would not pluck a laurel from the old straw skep, nor gainsay in the least this justly deserved encomium. It served its purpose and its time, but like our own venerable log-gum, which served so well the purpose of our fore-fathers in the early history of this country, it must give way to newer and better methods elucidated by the light of modern science.

Few American bee-keepers would con-



[PATENT APPLIED FOR.]

DESCRIPTION.—The body of the Hive, B, which is made of straw, has a movable bottom-board, A, having strips on both sides and one end, to form the entrance, and a $\frac{1}{2}$ inch space below the frames. There is a honey-board, C, with an opening 3x6 inches, over which fits a lid, D; there is also a wooden rim, E, $7\frac{1}{2}$ inches deep made to fit the body, B, with movable cover F, cleated on both ends to prevent warping, and hold it in place on the Hive. There is a 5-16 inch bee-space over the frames.

sent to go back to the old log-gum of their fathers, and few of our German brethren, we think, after they have tried the New American Straw Hive, would consent to go back to the barrel-shaped, hand-made affair of "ye olden times." That this time-honored, old straw skep has many advantages none will deny; but for easy and rapid manipulation, together with obtaining our product in the neatest and most marketable shape, the modern frame hive lays it forever on the shelf. Nevertheless, this hive, so nice to handle, is poorly calculated to withstand the extremes of heat and cold.

Knowing these to be facts, and knowing, also, of the almost uniform success of our brother bee-keepers across the

water, as mentioned by Mr. Gravenhorst, together with our own success in keeping bees in the New Straw Hive, it is with feelings of the utmost confidence that the latter is offered to the bee-keeping public, believing they will find in it a friendly helper in more ways than one.

They are made to take either closed-end or hanging frames, and as they average only about $9\frac{1}{4}$ pounds each, they are lighter than the 10-frame Langstroth hive and can be as easily and rapidly handled as the latter; while they are much lighter and more convenient to handle than chaff hives.

We have used this hive in our own apiary for about five years; in the winter of 1891-92, five colonies in the same came through without a loss, while out of 124 in board hives the loss was 32. In the winter of 1892-93 we had about two-thirds of our bees in the Straw Hive, and the loss was 28 per cent. while with the one-third in board hives the loss was 61 per cent. But that winter we had six weeks of severe cold weather in one stretch, while the walls of the new hive were then only $1\frac{1}{2}$ inches thick, and the covers were made of straw pressed in *wet*—which we considered by no means a fair test. They are now made with walls *two inches thick*, and a board cover; also with rim and honey-board, which allows of packing over the top. This we consider the best winter arrangement yet devised.

The past winter in our apiary of 85 colonies, 80 of which were in the New Straw Hive, we did not lose a colony; but of course it was a mild winter.

Five average colonies in the new hive compared with five in Simplicity (board) hives in the same yard, show at this date (April 14th) nearly double the strength in bees, and more than double the amount of brood; and the bees in the board hives were packed on one side and overhead with leaves; showing conclusively that the straw hives are much the warmest.

As an all-purpose hive for the general bee-keeper, who does not wish to cellar his bees or undergo the expense and bother of supplying outside cases and packing, and unpacking them on the summer stands, we confidently believe that the New Straw Hive stands without a peer in the apicultural field.

We have been working on this hive for the past six years, and have gone to a great deal of trouble and expense in bringing it to its present state of perfection. Now we hope our bee-keeping

friends will excuse us for trying to obtain a patent on the same, which is the only means by which we can protect our rights.

Adams County, Ill. •

Construction of Comb and Hatching Bees.

Written for the American Bee Journal

BY J. F. LATHAM.

Under the caption of "In the Apiary," the following article appeared in the Portland, Maine, weekly *Press* of March 8th:

THE CONSTRUCTION OF COMB AND HATCHING OF THE HONEY-BEE.

The comb consists of hexagonal cells placed end to end in such a manner that each cell is closed by three waxen plates, each of which also assists in completing one of the cells of the other side of the comb. The construction of the comb and the care of the young devolve upon the workers.

In the construction of the comb the bees take hold of each other and suspend themselves in clusters, which consist of festoons, crossing themselves in all directions, and remain immovable for about 24 hours, during which time the wax is secreted in the form of thin plates from between the scales of their bodies. A bee makes its way to the roof of the hive, and detaching its plates of wax in succession from the abdomen with the hind legs works them up with the tongue in the material which forms the comb. This bee is followed by others, which perform the work.

As soon as a few cells are thus prepared the queen-bee begins to lay her eggs. The first eggs develop into workers; the next produce the drones and also the queens. The eggs are deposited in the cells, and in five days the maggot is hatched. The sole employment of the queen-bee is laying these eggs, and as only one is deposited in each cell, this occupies her almost incessantly. The queen when thus engaged is accompanied by a guard of workers, who clear the way before her and feed her when exhausted. She lays workers' eggs for 11 months, and afterward those which produce drones.

As soon as this change has taken place, the workers begin to construct royal cells, in which, without discontinuing to lay the drones' eggs, the queen deposits here and there, about once in three days, an egg which is destined to produce a queen. The workers' eggs hatch in a few days, and produce little white maggots, which immediately open their mouths to be fed. These the workers attend to. In six days each maggot fills up its cell. It is then roofed in by workers, spins a silken cocoon, and becomes a chrysalis, and on the twenty-first day it comes forth a perfect bee. The drones emerge on the twenty-fifth day, and the queens on the sixteenth.

As for nearly a year the queen does not lay any eggs destined to become queens, if any evil befall her in that time the hive is left without a queen. Her loss stops the work of the hive, and unless another queen is provided, the bees either join another hive, or perish from inanition.

From its many glaring absurdities and misleading teachings in regard to the economic habits and procreative functions of the honey-bee, the above clipping seems to require a few words of comment; as the writer, from the gist of the teachings embodied in the article, evinces a lack of the theoretical and practical knowledge of the ways of the denizens of the hive.

After describing the correct way in which the bees cluster while secreting wax, the disclosure is clinched by the assertion that "they remain immovable for about 24 hours;" with a further description of the manner by which the wax scales are utilized by the comb-builders in forming the cells. If the writer's description of comb-building is derived from actual observation, there is but a slight opening for a doubt that an important discovery has been made—a discovery that would be received with gratification by modern investigators in bee-knowledge.

"A bee makes its way to the roof of the hive," etc. Did the writer know that such a proceeding would be in direct opposition to the real mode of operation, unless the writer's delineations are based on box-hive principles? It certainly conveys the idea that the comb-builders leave the real locality of their labors, if they are domiciled in a movable-frame hive, with an unsystematic impetus foreign to instinct, and contrary to the conditions consonant to the requirements of their tasks.

"The first eggs develop workers, the next produce drones and also queens." Can the writer inform us where was obtained the information that a drone ovum will produce a queen-bee? Next—"the eggs are deposited in the cells, and in five days the maggot is hatched." Another indication of a lack of experience, as well as theoretical information on the part of the writer—an absurdity in direct refutation of the teachings of our most experienced apicultural investigators and writers who have made the habits of the hive-bee a life study. I have verified this in more instances than I can now recall, and every bee-keeper must note the value of such a statement if he wishes to restore a hopelessly queenless colony of bees to a normal condition.

Although "but one egg is deposited in a cell" when the economic conditions of a colony are normal, the queen will, under certain conditions, deposit several eggs in a cell.

The queen is not accompanied by a guard of workers while depositing her ova; although she is at times surrounded by a number of nurse-bees that feed her and pay her considerable attention, the attention displaying a cause different from that which would be justified by calling the attendants a "guard."

The queen-bee does not "deposit worker eggs 11 months in the year, and afterwards those which produce drones." There is but a slight chance, if any, for a doubt, but that the queen-bee possesses the control of the sex of her ova as she often, while depositing egg, changes from worker to drone eggs, and *vice versa*, intermittently.

"As soon as this change takes place, the workers begin to construct royal cells, in which, without discontinuing to lay the drone's eggs, the queen deposits here and there an egg which is destined to produce a queen." The foregoing is so ridiculous in statements that it hardly admits of a fair criticism. Suffice it to say that the "construction of royal cells" is not limited to any particular time or premeditation on the part of the honey-bee; neither does the queen "deposit here and there, about once in three days, an egg which is destined to produce" a successor. With the exception of certain limited periods in the season of their activity, "royal cells" (queen-cells seems to be meant by the writer), it would be consistent with the general methods of domestic procedure in the hive for the members of the family to construct queen-cells.

As to the queen depositing once in three days an egg here and there that is destined to produce a queen, when from early spring to cool weather in the fall, a strong, active colony of bees will have many thousand eggs in their combs from which queens might be reared, the statement is without foundation in fact. Radically speaking, the mother of a colony of bees is not a predestination of Nature, but rather a mechanical production of the workers in their general capacity as nurse-bees.

"The little white maggots" do not "immediately open their mouths to be fed after hatching." For the first two or three days of their existence the larvae of the honey-bee receive their nourishment by other sources than their mouths, for, strictly speaking, they have no mouths.

When a colony of bees loses their queen during the active season (that is, from the first of May to about the 15th of September in this latitude), there is generally an abundance of material in their combs from which her loss could be restored, and in normal conditions during the summer months the loss of a queen is but a slight factor to the disorganization of the colony in which it occurs.

The statement that "for nearly a year the queen does not lay any eggs destined to become queens"—if she is a good one, is (if the writer infers that queens could not be reared from eggs laid during that time) too flimsy to admit of comment.

In conclusion the writer uses the word "inanition" in a sense that seems inapplicable to the idea he attempts to convey. Although some of the bees from a hopelessly queenless colony may join other colonies, the majority remain at their old home, and dwindle away in old age.

Cumberland, Maine.

Something on Marketing Honey, Etc.

Written for the American Bee Journal

BY MRS. B. J. LIVINGSTON.

Did you ever know the whole honey-trade of a large country store to be blocked for three months by seven "measly" sections?

Early in February last I went into the store with some fine honey to sell. I could not sell to them—in fact, they did not look at my honey. I knew where I could sell it.

As I passed out of the store I saw a large white platter on the counter with the filthiest looking sections I ever saw, even on a kindling-wood pile, or in the chip-yard. They were weather-beaten, and there were dead bees mashed into the propolis. There had not been the least effort to clean them. The honey in them was nice—some of it was water-white.

Last week I went into the store again. I had a basket of sample honey with me. There stood that old familiar plate of honey.

"We can't sell honey," said the merchant. I took a half dozen snow white sections out of my basket, and put them beside the dusty platter. The clerks and customers began to gather around, and remarked the difference. The merchant moved his plate of honey into the

back-ground. I finally bought it of him for a few cents, and sold him 40 pounds at a high price.

I passed his store an hour after, and he had the honey advertised by some very fine ornamental pen-work. I find our country merchants must be taught to grade honey.

THE CONDITION OF THE BEES.

Last fall I reported 40 colonies in the cellar, heavy with honey. By the first of February several hives were spotted. Early in March I carried out six; afterward, eleven more, and finally about April 5th all the others. I did not see a load of pollen going in until April 17th.

So you may judge I have had to struggle to get my pets into any shape for profit. I found three colonies smothered by the bottom-board having warped up and closed the entrance. After doubling up the weak ones I have 30 good, strong colonies left, with lots of honey. So it might be worse. But the dead bees on the cellar-bottom was a revelation to me. We carried out 50 quarts.

When I take the bees out of the cellar I put on a blank super, and cover the frames with unbleached muslin, two thicknesses. Then on top of that I place several thicknesses of newspapers. It has done well for me for several springs, and saves so much litter. One spring I packed them with the clippings from the rag-bag, but like leaves, it is littery.

I saw a few sections of California honey for sale in Fairmont (this State). It was from Acton, and selling for 20 cents a pound—very slow sale though. I wondered how much the producer got for it.

Centre Chain, Minn., April 23.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

TENNESSEE.—The next annual meeting of the East Tennessee Bee-Keepers' Association will be held at Whitesburg, Tenn., beginning on Thursday, August 16, 1894. All members and other interested in bee-culture are invited to attend.
Sneedville, Tenn. H. F. COLEMAN, Sec.

NEW YORK.—The Cortland Union Bee-Keepers' Association will meet with Mr. Warren Houghlin, two miles south of South Cortland, N. Y., on Thursday, May 24, 1894. All interested are cordially invited to attend.
Homer, N. Y. C. W. WILKINS, Sec.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Absconding Bees and the Law.

In "Swan's Treatise" on law, in the chapter on "Animals," and under section on "Wild Animals," we find this:

"Bees are deemed wild animals; but when hived and reclaimed, property is acquired in them. If a person finds a tree containing bees, on the land of another, and mark the tree, he does not thereby reclaim the bees, or obtain any property in them or the honey, even though he obtain license from the owner of the land to take them.

"Bees which leave a bee-house or domestic hive, belong to the owner of the hive so long as they remain in sight, and he may identify and reclaim them; but if he do not, they belong to the owner of the soil where they domesticate; but do not become private property until actually hived."

The above is universal law, based on common law. That is, in the absence of special circumstances, this would be law all over the Union.

Randolph, Ohio.

J. C. YORK.

Skunks or Polecats?

On page 379, Mr. C. F. Greening asks if "Skunks and polecats are not one and the same." In reply I would say that the difference is quite plainly defined.

Polecat. *Mustela pritorius*, allied to the weasel; slim, long-bodied, about one-fourth the size of the domestic cat; color, jet black, sometimes spotted (seldom striped) with white; tail large, bushy, and glossy. Said to be very destructive in the poultry-yard. This, however, is not always the case, as last spring a pair of these really beautiful little animals took up their residence in the wood-pile within a few feet of the chicken coops, and remained with us until fall. The young chickens, after leaving the maternal wing, roosted on the wood-pile, and I have seen the polecats in the bright moonlight, darting in and out among the chickens, none of which were molested.

A two-legged "skunk" came one night, however, provided with a sack, that reduced the surplus of young brahmas on short notice. A charge of No. 6 shot worked wonders in revealing to this benighted

mortal the error of his ways, while the other "varmints" were allowed to pursue their favorite pastime of catching mice, at which they are experts, and at times undoubtedly catch chickens.

The skunk, *Mephitis*, is a larger, stouter-built animal than the polecat; color, black with two broad white stripes extending from the head to the tail, one on each side of the back-bone. I believe they are more troublesome to poultry than the polecat. This is the chap that visits the bee-hives.

They often harbor under old buildings, and even behind boxes in the family cellar; are easily caught in steel-traps, and if the trap is fastened to the small end of a fish-pole, they can be safely drawn from the hole, and taken away and shot. Simply draw him out and let him hobble off, you bringing up the rear, guiding him with the fish-pole. Handle him gently—don't impose on a skunk just because he seems to be the weaker vessel—you are liable to be mistaken in this, and repentance often comes too late.

J. A. NASH.

Monroe, Iowa.

Bees Wintered Well.

I spent the winter in Florida, and have just returned. I found my bees all right on my return. I put 114 colonies into the cellar last fall, and lost but two in wintering. I have 111 good, strong colonies up to date.

FRANK RAY.

Hillsdale, Mich., May 5.

First White Clover Blossom.

The white clover was badly crippled here by the drouth last fall, so I don't look for more than a half crop of early honey this season. Bees are busy now on fruit-bloom, and redhaw and willows will soon be in. My little girl brought in the first white clover blossom to-day.

W. J. CULLINAN.

Quincy, Ills., May 3.

Honey One Thousand Years Old.

Perhaps when you see the above heading you will not read any more. But after I read R. McKnight's article on page 838, "Where Honey Comes From," I looked backward (as all Bellamys do), and saw the honey which we are getting was those years in the carcass of the lion, which is mentioned in scripture. So I thought perhaps you could not see it, and I would try and show you it.

Now, I agree fully in Mr. McKnight's theory, and I claim that honey eaten by people passes through their bodies, and into the atmosphere, and to the plants, trees, etc., again, then taken by the bees to the hive again, or if not taken by the bees from the flowers, the atmosphere takes it to other flowers, or rather the leaf first, and in a manner we get the loan of the honey, the atmosphere gets the loan of it, the tree or plant gets it for a time, the bee gets it again, and what they consume in winter goes to the atmosphere the same as what

we consume or passes through our bodies; and that the same honey or sugar is going its rounds, year after year, and has been since grass grew, and will continue to do so until there are no plants or trees, or people or bees, to require it. The same may be said of our water, which falls as snow, then melts, then the atmosphere gathers it up until it gets more than it can carry, then lets it down again in either rain or snow, dew, etc., and the same continues from year to year. The same is true of our hay, oats, etc., except the mineral part, the ashes.

JAS. R. BELLAMY.

Black Bank, Ont.

Early Swarming.

My brother had a swarm of bees to issue to-day (April 27th). Before this year his bees have swarmed the first day of May ever since he has had them, which is five years.

S. L. CRUMP.

Mt. Comfort, Ind.

Bees in Pretty Good Condition.

The bees are getting considerable honey from rock maple now, and are building up fast. As a general thing, they have come through the winter in pretty good condition in this locality.

W. G. LARRABEE.

Larrabee's Point, Vt., May 3.

Report for 1893—Wintered Well.

I started in the spring of 1893 with four colonies of Italians in the Nonparell hives. One colony wintered in a single brood-chamber of less than 900 square inches, on the summer stands, well protected with dry packing; it came out very strong, and I took off 120 pounds of nice comb honey, which I sold in the home market for 18 and 20 cents per pound. This colony did not swarm. The other three colonies all swarmed. I took off altogether 450 pounds of comb honey.

I bought two colonies, making nine, all wintered on the summer stands with no loss, and all are very strong. I had a very large swarm to issue on April 30th, and it is doing very nicely. My queens are all clipped.

I could not think of keeping bees without the "old reliable" BEE JOURNAL.

Shreve, O., May 7.

N. W. SHULTZ.

Bee-Keepers Don't Want the Earth.

To my mind it is not a matter of wonderment that Mr. Melbee gets 24 cents a pound for extracted honey. Brazen impudence, even to the extent of asking twice what an article is worth, accomplishes wonders. Effrontery always succeeds. Mr. Melbee may be sincere in believing that it is right to get an unfair price for a genuine article. I am not necessarily impugning his honesty. Many people think so. But really, isn't it a kind of cheating, whether applied to honey or not? Even though it

has a fixed price, it savors too much of the atmosphere of second-hand clothing shops.

It may be a matter for regret that extracted honey is not usually sold for more than 10 or 12 cents, at retail; but its intrinsic excellence is altogether a different matter from its market price. It is the latter, in common life, which determines what an article is worth. Mr. M. would feel much injured if, when ignorant of a fall in the price of potatoes, a neighbor should sell him a sack for twice their market value. By all means, let us ask the highest market price, and produce goods worthy of it; but let it not be supposed that apiarists want the earth!

F. L. THOMPSON.

Denver, Colo.

Wintered in the Best Condition.

My bees wintered all right, in the best condition I have ever had any. One of my neighbors, in cleaning out his yard the other day, found a colony of bees in an old corn-sheller. When they went in there, no one knows. As soon as I heard of it, I went to buy them for a novelty, but he threw them on a brush pile and burned them up. Was not that too bad?

A. S. STRAW.

Edwardsburg, Mich., April 9.

Subscriber for More than 20 Years.

I cannot do without the good old AMERICAN BEE JOURNAL, having had it for more than 20 years, and I hope it may prosper and grow better, and if my life is spared I hope to read it 20 years longer, and find it still more interesting. Wonderful progress has been made in bee-keeping since the AMERICAN BEE JOURNAL was first read by me.

I fear that the adulteration of extracted honey will ruin that part of honey-production, and we will have to turn to comb honey, and put up all extracted honey in small packages, and brand it with the kind, the time taken, seal and stamp, with name and place.

JOHN CRAYCRAFT.

Astor Park, Fla., April 21.

About the Sweet Clovers.

In reading the article on sweet clover, on page 368, I was very much pleased to see such a good picture of it, but I think R. H. Dugger's description of the yellow variety is wrong. After reading the article I took a street-car and went right out to one of my out-yards, where I have many acres growing, and procured two roots, and will mail them to you, and if not too much wilted before they arrive, you can plant them, and by June 10th we will have our demonstration on the subject. With me it has always proved itself a biennial.

Toronto, Ont.

JOHN MCARTHUR.

[The specimen roots arrived all right, Mr. McArthur, but somehow were mislaid,

and when found were dead past redemption.

Prof. Cook, in his valuable book, "The Bee-Keepers' Guide," says this about sweet clover:

"Sweet clover, yellow and white—*Melilotus officinalis* and *Melilotus alba*—are well named. They bloom from the middle of June to the first of October. Their perfume scents the air for long distances, and the hum of bees that throng their flowers is like music to the apiarist's ear. The honey, too, is just exquisite. These clovers are biennial—not blooming the first season, and dying after they bloom the second season. They perpetuate themselves, however, through the seed so as to really become perennial.

"The Bokhara clover is only a variety of the above, though Mr. D. A. Jones thinks it quite superior to the others."—EDITOR.]

Gusty Wants to Tell Some Things.

I vants do dells you some dings, mine pees vas doing vell dis shpring. I vinteder dem out mit der doors, ven de dermometer vent do vorty pelow noddng. Mine pees vas shust like mineself—da vas always in der right place ven der vork gomes long und da gan do peesness like noddngs, do.

Vat a goot, nice baper dose BEE JOURNAL vas, und vat vine gorrespondents it geeeps him! Mine cracious! I shust visht I good haf some dalks mit dose Meester Dolots. I likes it eef I good dells Meese Adtchley dot I preeds mine quveens do pe like mine oldt dutch moother, und reppresent her. Und dare vas dot nice Meester Melby und der Dr. Meeler mit hees las bease vor honey sellngs. Dot vas goot! Vy! Nex year I knows shust how to get dirty cent for mine honey! Dot Dr. Meeler vas a pooty shmart mans already yet. I dinks yah! Vot you dinks?

GUSTY SHRAEDER.

Hansburg, Westgonslan.

Results of the Past Season.

My report for 1893 is as follows: I put into winter quarters, on the summer stands, in 1892, 136 colonies, 75 in chaff hives, and of the balance some were in single and some were in double walled hives. The chaff hive colonies came out best, having lost four out of those in chaff hives, and 20 out of the others. I increased four last year, and got 7,000 pounds of honey, one-half extracted, and one-half in one-pound sections. Alfalfa is our main honey-plant, and the second crop hasn't yielded much honey for the last two years. The past winter I lost four colonies out of 136, but the balance are in better condition than last year. We had about our usual amount of winter, and rather a backward spring, but not so backward as last year. Alfalfa is about 6 inches high. All early fruit is in full bloom. Our prospects for fruit of all kinds was never better.

R. D. WILLIS.

Montrose, Colo., April 29.

To Get Ahead of the Swindlers.

At this time when unscrupulous dealers are using glucose by the carload, and are mixing a very little honey with it, and putting it upon the market as honey, it is very insulting to the producer of the pure article, as true bees' honey cannot be remuneratively produced at glucose prices—2 cents per pound. It also must be humiliating to the consumer as well. It seems this business is a rather nefarious one. What are bee-keepers going to do?

It seems when we take the above facts into consideration, there is a necessity, and as necessity is said to be the mother of inventions, so we must invent. So I have set myself to thinking about how bee-keepers could get ahead of these swindlers, and I have invented a system and contrivance whereby we may extract our honey at any season of the year when wanted, thereby obtaining a fresh and desirable article, equal to comb honey. By my method a dealer may extract the honey himself in the presence of his customers, thus proving its purity beyond a doubt, and returning the empty combs to the apiarist, as empty egg-cases are returned. Extracting-frames could easily be gotten up solid for the purpose, that would stand shipping as well as eggs.

While Mr. Melbee may be able to obtain 24 cents per pound, and W. O. Titus 15 to 18 cents per pound for extracted honey, I think it is safe to say that the majority of specialists are only getting from 5 to 8 cents per pound, and slow sale at that. The fact is, we bee-keepers are simply lying down and letting these vendors of vile stuff walk over us at will.

Now, brother bee-keepers, I would like some of you to test my method, and it shall cost you nothing. A. C. SANFORD.

CONVENTION DIRECTORY.*Time and place of meeting.*

1894.
May 24.—Cortland Union, at S. Cortland, N. Y.
C. W. Wilkins, Sec., Homer, N. Y.
Aug. 16.—East Tennessee, at Whitesburg, Tenn.
H. F. Coleman, Sec., Sneedville, Tenn.
1895.
Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York....Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

Honey & Beeswax Market Quotations.

ALBANY, N. Y., Mar. 23.—The honey market is very slow now. The demand is about over on comb. Some extracted wanted at 8c.; if dark color, 5c.
Beeswax, 26@27c. H. R. W.

BUFFALO, N. Y., Apr. 28.—The market is very quiet. Fancy comb, 13@14c.; choice, 11@12c.; buckwheat, 8@9c. Indications are that stock on hand will be closed out before new arrives. Beeswax, 25@58c. B. & Co.

CHICAGO, ILL., May 10.—The market for comb honey is not of large volume at this season of the year; a fine article of white comb brings 15c. in pound sections. Extracted slow of sale, at 4@6c. Beeswax, 25c.
R. A. B. & Co.

CHICAGO, ILL., Mar. 24.—The honey market will be very quiet for the balance of the season. We will not do much business until new honey comes in. We cannot quote prices but will obtain the best possible price on what little stock we will sell until early fall. Beeswax is very active at 25@26c. J. A. L.

CINCINNATI, O., May 7.—There is a slow demand for extracted honey at 4@7c. Prices for comb honey are nominal at 12@14c. for best white.
Beeswax is in good demand, at 22@25c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, Mo., Apr. 6.—We have had an exceedingly slow trade on honey this season, and prices ruled comparatively low. We quote to-day: No. 1 white comb, 1-lb., 14@15c.; No. 2, 13@14c.; No. 1 amber, 12@13c.; No. 2, 10@11c. Extracted, 5@7c.
Beeswax, 20@22c. C-M. C. Co.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 44 and 46 So. Water St.
R. A. BURNETT & Co., 161 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & Co., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs

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we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

May-Flowers and Mistletoe is the suggestive name of a book of over 250 pages containing selections of poetry and prose for all seasons, for older boys and girls, from the best writers of the day, with dialogues, motion songs, and drill exercises for smaller children. It is suitable for rhetorical exercises in the school and entertainments given by church, library and benevolent societies. Beautifully illustrated, and each poem or selection set in a colored border. Cloth-bound; size, 8x10 inches; price, postpaid, only \$1.00. Clubbed with the BEE JOURNAL for one year—both for \$1.75; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year.

Back Numbers.—We have quite a good many odd numbers of the BEE JOURNAL on hand, running back for perhaps 10 years. We have had some enquiry for such back numbers, and have decided to let them go at *one cent per copy*, postpaid. Any new subscribers who would like to see such back copies of the BEE JOURNAL can send us any number of cents they wish, and we will mail them as many copies, all of different dates. Please say, when ordering, back of just what date you would like to have them.

Advertisements.

FOR SALE—1000 or less, Mty Brood-Combs, 10c. each—packed for shipment. **Bee-Keepers' Supplies, etc.** Write for Circular. **JNO. NEBEL & SON.** 18A4t HIGH HILL, Montg. Co., MD.

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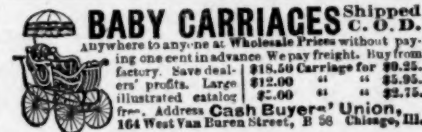
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